VZCZCXYZ0015 OO RUEHWEB

DE RUEHQT #0369/01 1151959
ZNR UUUUU ZZH
O 241959Z APR 08
FM AMEMBASSY QUITO
TO RUEHC/SECSTATE WASHDC IMMEDIATE 8758
INFO RUEHBO/AMEMBASSY BOGOTA PRIORITY 7525
RUEHBR/AMEMBASSY BRASILIA PRIORITY 3899
RUEHCV/AMEMBASSY CARACAS PRIORITY 3003
RUEHLP/AMEMBASSY LA PAZ APR 1030
RUEHPE/AMEMBASSY LIMA PRIORITY 2571
RUEHGL/AMCONSUL GUAYAQUIL PRIORITY 3515

UNCLAS QUITO 000369

SIPDIS

SENSITIVE SIPDIS

E.O. 12958: N/A

TAGS: <u>SENV</u> <u>ECON</u> <u>SMIG</u> <u>SOCI</u> <u>EC</u>

SUBJECT: CLIMATE CHANGE IN ECUADOR

REF: A. QUITO 225

1B. 07 QUITO 1497
1C. QUITO 259

11. (U) Summary: For years Ecuador has been experiencing symptoms of climate change such as glacial melting. This year, erratic weather is also leaving its mark on the country. Studies of the country's glaciers show a retreat of at least 28% in the last ten years. Scientists are concerned because these same glaciers provide most of the water for highland agriculture, hydropower, and municipal needs. As Ecuador faces clean-up costs from widespread flooding, changes in climate have become particularly relevant, but remain difficult for the GOE to adequately address. End summary.

## Glacial Retreat and Deforestation

- (U) Most in the NGO and scientific community in Ecuador are concerned about glacial melting that is the result of broader global warming. INAMHI (the Insituto Nacional de Meteorologia e Hidrologia), the Ministry of Energy and Mines' national weather agency, estimates that glaciers covered approximately 70 square kilometers in Ecuador in 2006, a 28% decline from 1998. This data is consistent with previous studies showing a 30% decline of the Cotopaxi glacier, one of Quito's primary sources of drinking water, from 1976-1997. Current studies of Cotopaxi indicate a retreat of 50 meters per year. Quito's municipal power company, the Empresa Electrica Quito, estimates that the amount of water flowing into the hydroelectric plant at Guangopolo from rivers fed by the Cotopaxi glacier has decreased by 40-50% over the last thirty years. The U.S. Department of Energy, the International Energy Organization, and the World Meterological Organization's Intergovernmental Panel on Climate Change (IPCC) predict that green house gas emissions will continue to cause declining Andean snow pack (the DOE estimates by as much as 55% by 2100) and a temperature rise of 2-3 degrees Celsius in the Amazon Basin by 2050-2100 (the Brazilian space agency estimates a rise of 4-8 degrees C), with dire implications for forest loss and potable water supply.
- 13. (U) Scientists point out that deforestation in Ecuador contributes to glacial retreat; indeed it may be Ecuador's greatest contribution to global climate change. Ecuador's deforestation rate was last measured in 2000 by CLIRSEN, the national satellite agency overseen by the Ecuadorian military's Geographic Institute, at 1.5% per year, probably the second-highest rate in Latin America after Paraguay. The head of Quito's forestry engineers' union tells us that the

deforestation rate in the northwest province of Esmeraldas is as high as 4.5%, due to the clearing of native forests for palm oil plantations. The Ministry of Environment has a very limited budget for enforcement, and nearly all logging in Ecuador takes place illegally.

## Unusual Weather a National Emergency

(U) The effects of pollution and deforestation on glacial retreat and climate change for any given year are difficult to measure, but it is clear that this year, Ecuador is experiencing very unusual climatic conditions (ref A). INAMHI says 2008 is the heaviest rainy period Ecuador has seen in ten years, due to the fact that the La Nina effect has been accompanied by unusually warm temperatures in parts of the Pacific between the Galapagos Islands and the mainland. Recent flooding on the coast and in the highlands has caused over \$150 million in agricultural and infrastructure damage, affecting nearly one third of Ecuador's population. Peace Corps and NGO contacts say the damage has been more severe than that caused by El Nino in 1997-98. On April 1, a massive sink hole measuring 40 meters in diameter and 100 meters deep opened underneath the edge of a major highway in downtown Quito. There were no injuries, but the government estimates the cost of repairs at \$1.5 million. The municipality declared a road emergency.

## Scarce Resources and ${\tt GOE}$ Efforts

- 15. (SBU) Scientific agencies uniformly tell us their budgets are restrictive. Existing resources are not well coordinated among agencies, and scientific data are not regularly published. Many scientific agencies have only been formed in the last ten years, as environmental law has been written and the need for information has grown. The Ministry of Environment's National Council on Hydrologic Resources (an agency that manages contracts for the supply of potable water to municipalities) tells us it does not share data with INAMHI (the agency that studies glacial retreat); and the pattern is similar in almost every scientific field.
- $\underline{\mathbf{1}}$ 6. (SBU) At the political level, the GOE has made its "Keeping the Oil in the Ground" proposal (a proposal to avoid drilling for oil in the Ishpingo-Tambocoha-Tiputini or ITT field in Yasuni National Park\*reftels B and C), its showcase initiative to combat global warming. Through this initiative, Ecuador is proposing to forgo 50% of the value of oil that would be extracted over the next 40 years. (Note: this initiative is ambitious but poorly defined and may not come to fruition; Correa has established a deadline of October 2008 before opening the field to development.) GOE has signed the Kyoto Protocol, and is a member of the U.S. Methane to Markets Partnership for clean energy. Ministry of Environment (MAE) also regularly holds conferences related to climate change; in October 2007 it worked with the Andean community and the Municipality of Quito to hold the week-long "ClimaLatino" conference in Quito and Guayaquil to raise public awareness.
- 17. (U) Still, the need for increased training and technical assistance is great. The Ministry of Environment is under-funded, and in the absence of substantive policy initiatives, does what it can to develop connections with technical agencies worldwide. Over the last ten years, the U.S. government has helped conserve the biodiversity of over 1.2 million hectares in Ecuador (this year alone, USAID will provide over \$800,000 for biodiversity management). The USG has also donated \$2 million in assistance for the floods. Probably the greatest U.S. contribution is that made by NOAA, through the tsunami warning buoys it maintains and data it makes available to Ecuador. The EPA, U.S. Geological Survey, and Department of Energy also all cooperate regularly, though informally, with Ecuadorian scientific agencies.

¶8. (SBU) Members of the GOE and the public continually express interest in combating climate change. Like many countries, Ecuador is still in the process of defining how to address the issue. The Correa administration has made token gestures towards protecting the environment, particularly through the ITT initiative, but in general it has focused real political will on more sensitive social and political issues. This year, climate has become an emergency. While most GOE and international funding will be directed to relief efforts instead of prevention, the underlying need for scientific expertise will remain underdeveloped. Post will seek ways to support the scientific community, particularly by promoting relationships between bilateral scientific agencies and through the International Visitors' Program, IIP Speaker programs, and the Embassy Science Fellows Program. End comment.

Jewell